

6. **(Thrice Amended)** The process according to claim 3, wherein the structure-specific substances have a binding constant in the range of 10^5 - 10^{15} (mol/l) $^{-1}$.

7. **(Thrice Amended)** The process according to claim 3, wherein the structure-specific substances have a binding constant in the range of 10^7 - 10^{15} (mol/l) $^{-1}$.

8. **(Thrice Amended)** The process according to claim 1, wherein the sample is moved during the measurement and a sample signal is modulated.

11. **(Trice Amended)** The process according to claim 1, wherein simultaneous determination of several different analytes in a sample of liquids or solid substances is carried out by sequential magnetization of a sample to be measured.

12. **(Twice Amended)** The process according to claim 11, wherein for simultaneous quantitative determination of analytes, different ferromagnetic or ferrimagnetic substances with discrete coercive field intensities are used.

16. **(Thrice Amended)** The process according to claim 1, wherein the ferromagnetic and ferrimagnetic substances have a particle size of 1 to 1000 nm.

17. **(Thrice Amended)** The process according to claim 1, wherein the ferromagnetic and ferrimagnetic substances have a particle size in the range of 2 to 500 nm.

18. **(Thrice Amended)** The process according to claim 1, wherein the ferromagnetic and ferrimagnetic substances are stabilized with a shell of oligomeric or polymeric carbohydrates, proteins, peptides, nucleotides, surfactants, synthetic polymers, and/or lipids.

26. **(Twice Amended)** The process according to claim 1, wherein ferromagnetic or ferromagnetic substances are introduced into the human body or are applied on the human body, and the remanence of the magnetization of the ferromagnetic or ferromagnetic substances is determined after a magnetizing field is shut off.

27. **(Twice Amended)** The process according to claim 3, wherein ferromagnetic or ferromagnetic substances are introduced into an organism or applied on the organism, by a process comprising

- (i) labeling structure-specific substances with ferromagnetic or ferromagnetic substances,
- (ii) adding said magnetic labeled structure-specific substances to a living organism or applied to an organism,
- (iii) magnetizing a volume of the organism with the aid of a magnetic field that is applied from the outside and,
- (iv) measuring remanence of the magnetic markers with the aid of magnetic field sensors after the external field is shut off.

28. **(Twice Amended)** The process according to claim 27, wherein antibodies, antibody fragments, agonists that bind specifically to receptors or their antagonists, peptides, proteins, receptors, enzymes, enzyme substrates, nucleotides, ribonucleic acids, deoxyribonucleic acids, carbohydrates, or lipoproteins are used as structure-specific substances.

39. **(Twice Amended)** The process according to claim 1, wherein the ferromagnetic or ferromagnetic substance is magnetic-labeled anticollagen II and SQUID(s) are used to determine remanent magnetization.

40. (Amended) The process according to claim 1, wherein structure specific substances are labeled with the ferromagnetic or ferrimagnetic substances, and added to the analyte.

41. (Amended) The process according to claim 1, wherein the analyte is labeled with structure specific substances, and the ferromagnetic or ferrimagnetic substances are added thereto.

42. (Amended) The process according to claim 41, wherein the structure-specific substances are antibodies, antibody fragments, biotin, substances that bind specifically to biotin, agonists that bind specifically to receptors of their antagonists, peptides, proteins, receptors, enzyme substrates, nucleotides, ribonucleic acids, deoxyribonucleic acids, carbohydrates, or lipoproteins.